



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,919	09/25/2003	Phillip M. Morgan	2003-052-TAP	6541

7590 05/03/2006

Timothy R. Schulte  
Storage Technology Corporation  
One StorageTek Drive  
Louisville, CO 80028-4309

EXAMINER

HAUGLAND, SCOTT J

ART UNIT PAPER NUMBER

3654

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**RECEIVED**

**MAY 03 2006**

**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/670,919  
Filing Date: September 25, 2003  
Appellant(s): MORGAN ET AL.

---

Theodore D. Fay, III  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/21/06 appealing from the Office  
action mailed 7/27/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,868,333	Nayak	2-1999
6,435,439	Ishihara et al	8-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 4-6 12, 13, and 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nayak (U.S. Patent No. 5,868,333) in view of Ishihara et al (U.S. Patent No. 6,435,439).

Nayak discloses a magnetic tape cartridge comprising a door 54 on a first face of the cartridge, a slider 66 on a second face of the cartridge adjacent the first face, a belt 68 connecting the door and the slider so that the door can be opened by movement of the slider, belt post 26 for guiding the belt so that it bends at an angle, and a torsion spring 72 that biases the door toward its closed position.

Nayak does not disclose that the door 54 opens by sliding parallel to the first face or that a compression spring provides force to close the door.

Ishihara et al teaches providing a tape cartridge 1 with a sliding door 27 that slides parallel to a face of the cartridge that includes an aperture closed by the door. Ishihara et al teaches providing the cartridge with a compression spring 10, 36 to provide a force to close the door.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Nayak with a sliding door as taught by Ishihara et al to reduce the space required to open the door. It would have been obvious to provide Nayak with a compression spring as taught by Ishihara et al to provide the force for biasing the door to the closed position since it would have been apparent to an ordinary artisan that many different types of springs would be capable of providing the required

closing force. Use of a compression spring allows for arrangement of parts to reduce the height (perpendicular to the large faces of the cartridge) of the door mechanism.

**(10) Response to Argument**

Appellants argue (section A.1) that the proposed combination changes the principle of operation of the device disclosed by Nayak. Appellants state that "Nayak only teaches the pivoting or rotating mechanism and suggest no other mechanisms that operate on a different principle, like sliding as in the claimed invention. Similarly Nayak also does not teach or suggest any other mechanisms for moving the door, including lifting, pushing, flexing, or collapsing. Incorporating a door operating on any principle other than the pivoting or rotating principle described in Nayak would mean modifying, altering or replacing the principle of operation of Nayak's system" (p. 14, lines 11-16 of the brief). Appellants appear to be addressing the references individually since appellants are essentially saying that it would not be obvious to modify the door structure of Nayak regardless of the teachings of the prior art. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, modification of Nayak to provide a sliding door would not amount to a modification of the principle of operation of the device of Nayak, but a modification of details of its operation. The resulting tape cartridge would perform the same functions as Nayak's and could be made to be compatible with the same tape drive device.

Appellants (section A.2) argue that there is no teaching, suggestion, or motivation to combine the references because the proposed advantage noted by the examiner is not present in the cited references and is not based on the prior art. The examiner noted that the sliding door taught by Ishihara et al would provide a reduction in the space required to open the door over the space required by the door of Nayak. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion or motivation noted by the examiner is present in the prior art. It would have been apparent to an ordinary artisan from a comparison of Nayak and Ishihara et al that the sliding door taught by Ishihara et al would provide a reduction of space required for opening the door, permitting greater tape holding capacity for a given set of external cartridge dimensions. A reference could not be expected to provide an explicit statement of all of the benefits of the disclosed invention relative to all other related art known at the time of invention and could not address devices that have yet to be invented. The motivation to combine references need not be explicitly stated in the references. The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been

produced by their combination. *In re Semaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

Appellants argue that Nayak has no need for a sliding door. However, while the Nayak device is operable and does not "need" a sliding door to be so, this is not the test for obviousness. The obviousness of a proposed modification depends upon whether the prior art teaches the proposed modification. As discussed above, the proposed modifications are seen to be taught by the prior art as a whole.

Appellants argue that the examiner has used impermissible hindsight in rejecting the claims (section A.3). However, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As pointed out above, the suggestion for combining Nayak and Ishihara et al, while not explicit in the references, is present in the prior art and does not require the benefit of appellants' disclosure. Appellant has provided no support for the statement that the proposed advantage does not actually exist and appears to assert that it does exist (e.g., p. 20, lines 5-6).

With regard to appellants' contention that Nayak and Ishihara et al are directed to different problems (section A.5), it is pointed out that any reference addresses, at least implicitly, a number of different problems. The lack of an explicit statement of certain

benefits or teachings which would be evident to an ordinary artisan does not negate those benefits or teachings. E.g., Nayak not only provides an apparatus for holding a single tape reel in which the cartridge aperture cover is detached from a tape media leader block, but also provides an opening mechanism to open and close an aperture door (col. 2, lines 9-12). Other cartridge structure is disclosed in Nayak and Ishihara et al. The references are not limited to the features cited by appellants. It is noted that the discussion of space requirements in Nayak (cited at the top of p. 18 of the brief) refers to space inside a read/write device, not the cartridge.

In response to appellants' argument based upon the age of the references (section A.7), contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

Appellants further argue that neither Nayak or Ishihara et al shows or suggests a post as recited in claim 4 (section B.1). However, Nayak discloses post 26. The claims do not distinguish over the post 26 in Nayak. Appellants cite a definition of the term post (p. 22, lines 9-11). Post 26 of Nayak meets this definition as well as the post disclosed by appellants. Appellants appear to urge that this is not the correct definition of "post" and refer to "pillar" and "column". In the specification, the primary disclosed function of the post 316 is to provide a turning guide for belt 314. A reasonable interpretation of claim 4 in light of the specification does not place any other limitations on the shape of the post. The post 26 in the Nayak cartridge is clearly suitable for



guiding belt 68. It is noted that Nayak discloses other configurations of the belt guide, e.g., a pin structure (col. 5, line 5).

Appellants argue that the combination of Nayak and Ishihara et al does not teach the invention recited in claim 6 and, specifically, the compression spring (sections C.1, C.2). Ishihara et al teaches providing a cartridge such as that of Nayak with a sliding door to obtain the space saving advantages discussed above. Ishihara et al teaches using a sliding door and compression spring combination to close a tape cartridge. The combination of a sliding door and compression spring reduces restriction of the tape storage space over the pivoting door and spring of Nayak. The cable 68 in Nayak does not eliminate the need for the compression spring. The compression spring replaces torsion spring 72 acting on the door in the Nayak cartridge. A spring is needed to urge and maintain the door in a closed state in the cartridge of Nayak as disclosed and as modified by Ishihara et al. The cable is for opening the door against the force of the spring. These comments apply to claims 18, 19, and 22 (section D), as well.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 3654

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
sjh

4/25/06

  
**KATHY MATECKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**

Conferees:

Kathy Matecki

John Nguyen

  
